



APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 4, first full paragraph, please delete in its entirety and replace with the following new paragraph.

Accordingly, still another object of the present invention is to provide a method of and a system for reading the test piece which [makes]allows easier and less expensive biological analysis such as DNA analysis, immunological analysis and the like.

Page 5, third full paragraph, please delete in its entirety and replace with the following new paragraph.

Preferably the strip-like substrate is a flexible member in a continuous length from the viewpoint of [easiness to] ease of manufacture and mass productivity.

Page 15, first full paragraph, please delete in its entirety and replace with the following new paragraph.

Further such reduction of cost makes it feasible application of the test piece to screening of a human or an animal infected with pathogenic bacterias or viruses, screening of [the cancered] cancerous cells, and the like.

IN THE CLAIMS:

The Claims as changed as follows:

1. (Amended). A test piece for use in biological analysis of a sample comprising:
a strip-like substrate comprising a plurality [bearing thereon numbers] of known specific binding agents which are different from each other, each of said plurality of binding agents being applied across an entire width of the strip-like substrate [and are arranged in a line] at predetermined intervals and spaced apart from another of said plurality of known binding agents in [the] a longitudinal direction of the strip-like substrate, wherein said substrate is flexible.

Claim 2 has been cancelled.

6. (Amended). An apparatus for manufacturing a test piece for use in biological analysis of a sample organism comprising a strip-like substrate bearing thereon numbers of known specific binding agents which are different from each other and are arranged in a line at predetermined intervals in the longitudinal direction of the strip-like substrate, the apparatus comprising:

[numbers of application means which are] a plurality of applicators arranged at predetermined interval in a [second] first direction [relatively] relative to a sheet-like substrate [and] each of said plurality of applicators respectively operable to apply [the] one of the plurality of known specific binding agents on the sheet-like substrate,

a conveyor [means] which conveys the plurality of applicators or [application means and] the sheet-like substrate [relatively] relative to each other in a second [first] direction which is

substantially perpendicular to the [second] first direction while the [application means are applying] applicators apply the plurality of known specific binding agents, thereby applying the plurality of known specific binding agents in lines which extend in the [first] second direction and are arranged at predetermined intervals in the [second] first direction, and

a cutting means which cuts the sheet-like substrate bearing thereon the plurality of specific binding agents in the first [second] direction into a plurality of strips.

14. (Amended). A system for reading a test piece comprising a strip-like substrate bearing thereon numbers of known specific binding agents which are different from each other and are arranged in a line at predetermined intervals in the longitudinal direction of the strip-like substrate, the system comprising:

an exciting light source which projects, onto the test piece applied with substrate derived from a sample organism labelled with fluorescent dye, exciting light which excites the fluorescent dye,

a conveyor which conveys the strip-like substrate or the exciting light source to impart relative movement between the strip-like substrate and the exciting light source, said relative movement being along a single axis;

a photodetector which detects fluorescence emitted from the test piece upon excitation by the exciting light, and

an analysis means which relates the result of detection of the fluorescence with the positions in which the fluorescence is emitted and thereby determines the specific binding

agent(s) on the test piece with which the substance derived from the sample organism is hybridized.

19. (Amended) A system as defined in Claim [19] 17 further comprising a scanning system which causes the exciting light to linearly scan the strip-like test piece in the longitudinal direction thereof.

Kindly add the following new claims:

--20. The system defined in claim 19, wherein the scanning system scans in only the longitudinal direction of the strip-like test piece.

21. The system of claim 6, wherein the binding agents are formed in continuous lines across the sheet-like substrate.--